### OPAL SERVICE DISTRICT

# **Background**

The Community of Opal centers on the intersection of Routes 17 and 15/29. Opal once had a dual role as a local and as a regional crossroad, but the gradual spread of car ownership, which enhanced Opal's regional role, weakened the local role, hence the disappearance of the Opal Dance Hall, grocery store and other village facilities. Further, much of Opal is underlain by soils with high shrink-swell characteristics, which break up road and building foundations and are unsuitable for dense development. Additionally, the ad-hoc nature of Opal's business development, with multiple commercial entrances, has created problems relating to site access, turning movements and reduced road capacity. Increasing traffic volumes has exacerbated these and associated issues. If not addressed, these unfortunate traffic safety issues could undermine Opal's current and long-term prosperity.

# 1. Existing Characteristics

# a. Planning History

Fauquier County's first Comprehensive Plan of 1967 recognized the significance of Opal as a regional crossroad, and proposed to surround the intersection of Routes 29 and 17 with large acreages of commercial and employment uses. Beyond this core of highway-oriented business, the Plan, somewhat incongruously, proposed a circular "belt" of low-density residences, presumably, on individual drainfields. The 1987 Plan understood that a scatter of houses around a highway stop would never be a community, and removed the residential "belt". But fragments of the "belt" were reintroduced in the 1994 Plan, since the Fauquier County Water and Sanitation Authority (WSA) was extending a very expensive sewer line to Opal from Bealeton.

# b. Planned Growth Patterns

Apart from the 1987 Plan, which lined the Opal intersection with narrow strips of highway-commercial uses, the 1967 and 1994 Plans provide no logical model of community settlement.

# c. Community Facilities

A number of gas station/convenience stores and various fast-food establishments function today as meeting places in Opal.

## d. Transportation

US Route 15/29 is a Federal Highway, and this major arterial road carries over 37,000 vehicles per day. Route 17 is also a major arterial road and carries over 17,000 vehicles per day. Both roads are important links in the regional movement of goods and services, with a growing proportion of multi-axel trucking. Traffic projections conservatively suggest growth rates of 3–4 % per year. Transportation access issues, aggravated by strip commercial development, on the very busy intersection of these two roads will only increase as local and regional traffic volumes grow.

Significant local and regional traffic growth has also generated a second issue. Business development along these roads developed in a very casual way over the last 30 years. Erratic traffic behavior, which may have been tolerable in the past, is now inherently unsafe -- with vehicles suddenly slowing down to exit the road for meals, or to tank up with gas, and with tractor-trailer trucks opportunistically crossing the median and thereby blocking 4 lanes of moving traffic. Opal has not acquired as yet the reputation of a hazardous zone, but current conditions and future trends are not good.

A third transportation issue concerns the acreage of land currently planned for commercial and employment uses in Opal. A 1998 County commissioned study revealed that the 550 plus acres of land planned for commercial and employment uses within the Opal Service District could generate in excess of 71,600 two-way trips per day. Furthermore, nearly 7,500 of these trips would occur in the afternoon peak hour. Since a road such as US Route 15/29 can carry 700 – 900 vehicles per hour, such traffic generation, if even only partially realized, without expensive, multi-lane and flyover road capacity improvements, would effectively "lock" US Route 15/29 for extended periods of the day.

#### e. Utilities

A public sewer line from Bealeton serves the northeast quadrant of the Routes 29-17 intersection. There is no public water service in Opal. However, the Fauquier County Water and Sanitation Authority (WSA) has completed initial studies identifying areas where additional hydro-geologic and well-pumping tests are needed to identify reliable and quality groundwater sources. Funding the completion of this study and, ultimately, well development by the WSA is essential. Basic data and the designated zones for public water supply are included in the *Groundwater Resource Study Results of Phase II*, *Opal Study Area (prepared by Emery & Garrett Groundwater, Inc., March of 2000, for the Fauquier County Water & Sanitation Authority*). (See Utility Element).

## f. Natural Resources

The Opal area lies within, if on the edge, of an old lakebed that extends south to Remington and east to Bealeton and beyond. Local soils in the area have poor perk potential, are very water retentive, and some possess very high shrink-swell qualities that will wreck havoc on road and building foundations not specifically designed for such conditions.

## 2. Opal Service District Vision Statement

## **VISION STATEMENT:**

Opal will designed to accommodate and serve regional through-traffic on Route 17 and U.S. Route 15/29 as a pleasant and friendly place to take a break on long drives between North Carolina and Washington D.C.

## **OPPORTUNITIES:**

With traffic flows of 37,000 vehicles per day and growth of 3-4 % per year, Opal has the enviable characteristic of excellent regional location. Opal should build on this regional

transportation asset and ensure that future travelers will continue to associate Opal as a place delivering safe access and high quality, attractive goods and services.

### AREAS NEEDING SPECIAL FOCUS:

Opal has become a difficult and potentially unsafe place to drive because the District's strip commercial "pads" lack inter-parcel connections, present multiple and confusing access points on US Route 15/29, encourage casual median crossing in the context of increasing traffic volume and speeds. These are characteristics that must be resolved, as business areas with congestion and traffic safety issues court financial problems.

#### STRENGTHS:

Landowners and merchants in Opal have a proven ability to deliver fine services at competitive prices. These will need to work together and with the Virginia Department of Transportation to build a coherent economic engine, with service roads and landscaping, coordinated and shared entrances/exits, a clear and effective community image of buildings and signs which convey a message that Opal is the place for travelers to stop, shop and recharge. The community has the creative and dynamic resources to re-tool, with road investments being a critical element.

#### 3. Land Use Plan

## a. Overall Layout

The Plan proposes to remedy the central transportation issue for Opal with the construction of service roads, set back one lot deep, from US Route 15/29. Traffic needing to execute a leftward u-turn could use these service roads and cross US Route 15/29 at controlled/signalized intersections. These intersections would permit the closing of many median crossovers as the Plan is implemented. The Plan further proposes to locate land in the northwest quadrant for commercial and flex office industrial uses to capitalize on Opal's excellent location for local contractors and southbound travelers. This mix of non-residential uses would extend immediately to the south of Route 687, Opal Road. (See Figure OP-1 and OP-2)

Land located in the northeast quadrant of the District, currently an uncoordinated mix of residential and industrial zones, would be developed as a novel "Live-Work" district for craftsmen. This land would buffer residential areas along Clarkes Road from commercial uses along Route 15/29. Implementation of such a new district will require amendment to the Zoning and Subdivision Ordinances – see Overall Policy Guidelines for the Live-Work Zone below.

Land located in the southeast quadrant of the District and to the north of the new Route 17 right-of-way would remain in employment use. Land to the south of the new alignment, along Fayettesville Road/Route 844, would remain in residential use.

Land located in the far southwest quadrant of the District, on the west side of Route 15/29, may be developed with hospitality-business-traveler uses – such as a hotel/motel, restaurant, golf/sports club – not exceeding a total of 125,000 square feet, on public sewer and water. Construction of this complex would include the provision of a service

drive and be phased after final design and installation of the Commonwealth Department of Transportation's Route 17 interchange with Route 15/29.

## b. Transportation

The Virginia Department of Transportation has acquired property along US Route 15/29, about 1/3 mile south of the present intersection with Route 17, to construct a partial grade separated interchange. However the Department proposes to merge northbound Route 17 traffic at its existing intersection with Route 15/29. This condition results in the mixing of Route 17 traffic accelerating onto US Route 15/29 29into the very lanes that northbound travelers on this road use to decelerate and exit into local commercial venues. This plan proposes that northbound Route 17 traffic merge into Route 15/29 about 1/3 mile to the south, at the location of the Department's new interchange.

#### c. Parks

The Plan designates a number of environmental areas within the Service District as passive parks for the enjoyment of those living in the District, with the expectation that Opal merchants will recognize the potential to provide travelers with picnic areas and a restful break.

## 4. Overall Policy Guidelines for the Live-Work Zone

The Opal Plan presents an opportunity to create a new Live-Work zoning district with an objective to provide an affordable home/office/shop for self-employed professionals, craftsmen, and start-up businesses. The County has had a number of "neighbor" issues with ad-hoc home-occupation uses in regular residential zoning districts. The County would seek to resolve such potential Live-Work issues at the outset

## a. Proximity and Impact of the Workplace

A workplace located immediately adjacent to a home can create a real hardship in terms of noises, vibrations, visitors and other associated nuisances. While the level of these nuisances might not be objectively more significant than a loud residential dishwasher, or a high pitched vacuum cleaner, the "working character" of such impacts – for example a rapid-fire nailing gun – can be disturbing. The new Live-Work zoning district will seek to mitigate these effects by listing allowable non-residential uses – such as woodworking, crafts, sheet metal and plumbing, stone fabrication and printing – proscribing obnoxious uses generating health hazards, and separating the residential and the employment uses on each lot, by locating the home at the front of the lot, and the office/workshop to the rear. The Live-Work district will further limit encroachment of employment uses into the residential portion of the lot with a pre-determined boundary. See attached drawing.

A zoning requirement that the lot owner occupying – or renting – the workplace at the back of the lot, should be resident at the front will further tend to reduce intolerable and in-appropriate offsite impacts.

# b. Storage

Nothing dispels the residential character of a neighborhood more quickly than storage yards filled with assorted materials, rusting tools and partially repaired vehicles. Though

an additional cost, the Live-Work district will require that the storage of materials, tools and vehicles be enclosed.

## c. Access and Parking

Workshops and businesses generate a rather different stream of vehicles, and at different times than a typical residence. Many homeowners may become upset with the sight of four or five working/older vehicles parked across the street from their driveways. The requirement of an alley at the back of a Live-Work lot and/or a requirement that employee vehicles and delivery trucks use this alley and/or park at the rear would resolve this issue.

# d. Scale and Appearance of Workshop and Storage

While architectural design and preferences change through time, homes typically maintain a certain bulk and volume, reflecting the generally 10-foot by 14-foot (+/-) shape of living, dining rooms, bedrooms, and 700–1,400 square feet per residential floor. Workshops and Storage structures tend towards a larger bulk and volume. Furthermore, typical wall materials and windows of a residence and of a workshop tend to differ markedly. The Live-Work district would require that workshop and storage structures be no larger than a four-car garage 24 foot by 36 foot. The district regulations might also require wall materials and whatever windows installed in the workshop be consistent and harmonize with the residence on the lot.

### e. Lot Size

The minimum lot needed to accommodate home, assorted workshops, storage-sheds, parking of family vehicles and work related delivery trucks would be 60,000 square feet.

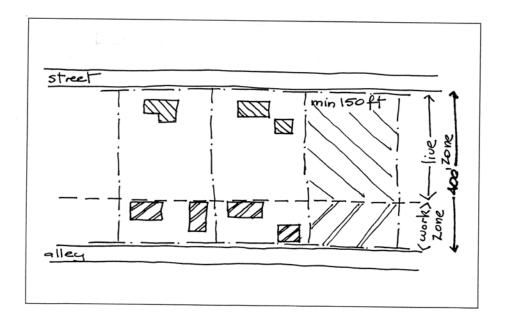


FIGURE OP-3
ILLUSTRATIVE SKETCH OF A LIVE-WORK NEIGHBORHOOD

# 5. Roadside Landscaping and Architectural Standards

Many travelers on Routes 15, 17 and 29 form an impression about Fauquier County based on the prospects afforded by these roads. Unfortunately, much of the commercial development alongside these arteries bear no relationship with the qualities of the built environment in the County. Fauquier has much more to offer travelers, who should be invited by the quality of their experience to linger, dine and visit the community. This Plan endorses the commencement of work by the Fauquier County Architectural Review Board to develop roadside landscaping and architectural guidelines for the County's major road corridors and a Highway Overlay District is the recommended option.

# 6. Land Use Acreage and Development Statistics

Table OP-1 provides data concerning existing and developable land within the Opal Service District. The table assumes that non-residential land will be re-developed within the time frame of the Plan.

TABLE OP-1
OPAL SERVICE DISTRICT DEVELOPMENT ACREAGES

Land Use Category	Developed acres	Undeveloped acres	Total acres
Commercial Industrial	0	133 69	133 69
Flex Office-Ind.	0	60	60
Live Work	0	106	106
<b>Residential Low</b>	50	18	68
Total	50	386	436